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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,110	11/27/2001	James Fletcher	FLTCHR2	9399
26663	7590	05/24/2005	EXAMINER	
LARRY J. GUFFEY WORLD TRADE CENER - SUITE 1800 401 EAST PRATT STREET BALTIMORE, MD 21202			MADSEN, ROBERT A	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,110

Applicant(s)

FLETCHER, JAMES

Examiner

Robert Madsen

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7-9,11,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-9,11,14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 24, 2005 has been entered. Claims 4,6,10, 12, 13 have been cancelled and claims 14 and 15 have been added. Claims 1-3,5,7-9,11,14,15 remain pending.

Specification

2. The amendment filed February 24, 2005 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

- "In discussing these methods, it proves useful to think of the initial muscles which are to-be-separated as being individual chunks of meat having a volume which can be appropriated or assumed to be essentially round in shape and to have an effective initial diameter. Then, "
- The specification of the "initial" diameter in methods (1), (2), and (3).
- "wherein it can be seen that these methods share the common trait of causing the initial chunks of meat to pass proximate portions of a solid surface which

Art Unit: 1761

define a separation gap that is less than that of the meat's initial diameter. Such methods can be seen to be quite different than the typical extrusion, shredding or mincing processes than have been used in the prior art to process scallops and other seafoods."

The added material suggests that the individual adductor muscles be considered essentially round to have an effective initial diameter and correlates the diameter of the round chunks to the methods of applying shear stresses. There was no suggestion previously to consider the initial adductor muscles as round in relative to the particular method of applying surface shear. Additionally, there was no suggestion of the criticality of the separation gap relative to the initial diameter of the muscle for *all* of the shearing methods.

3. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-3,5,7-9,11,14,15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. In particular, claims 1 and 7 contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant (Page 6 of the response, lines 22-23) has

Art Unit: 1761

stated on record that a plane of separation is geometrically different from a line of separation, and that the presently amended claims exclude any type of line of separation. However, there is no such distinction made in the disclosure, and it appears that a plane of separation and a line separation as disclosed by applicant are interchangeable. The originally filed specification discloses both "lines" of separation (Page 3, lines 10-11) and "planes" of separation (Page 6, lines 20-21), and the originally presented claims 4,6,10,12,13 recited "lines" of separation. Thus, it is not described in the specification how a line of separation and plane of separation differ with respect to the present invention.

6. Claims 14 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As discussed above relative to the amendment to the specification, the original disclosure did not there was no suggestion of the criticality of the separation gap relative to the initial diameter of the muscle for *all* of the shearing methods.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1761

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3,5,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeuchi et al. (US 4692341) in view of Joaquin (US 3532512)

9. Regarding claims 1 and 3, Joaquin teaches a simulated shellfish product based on a less expensive and less rare type of seafood. In particular, Joaquin teaches obtaining long separate fiber pieces from the grainy structure of the scallops and are reoriented to match not only the taste, but the grain structure or texture of abalone. The match is so close that Joaquin claims to be able to fool gourmets by the taste, structure and texture. Thus, the volumes of the fiber pieces of the scallops must be comparable to the volume of the abalone since the scallop fibers are capable of forming an abalone like fiber structure and texture (Column 1, lines 10-70, Column 3, lines 40-50). Joaquin starts with scallops in their raw state and not soaked in water as recited in claim 2, places them in a dough mixer for tumbling and beating so that the scallop meat is naturally broken apart to yield separated long fibers that remain intact, and cooks the pieces. Joaquin implicitly teaches the meat breaks along its natural planes of separation because the shear stress of the seemingly random beating and tumbling applied to the surfaces of the scallops causes the meat to *only* separate along the plane that extends along the length of each scallop, not along the width (note Figure 1 in light of column 2, lines 17-72). Joaquin further teaches the fibers are formed by placing meat of an initial diameter (e.g. item 12 of Figure 1) in an apparatus with a dough mixer (e.g. item 18) such that only meat fibers (items 20) pass through the exit below, or proximate a surface having a separation gap less than the initial diameter of the meat,

Art Unit: 1761

as recited in claim 14. If the distance between the mixer and the walls of apparatus 18 were not less than the initial diameter of the scallop, the apparatus would not produce the fibers and some unprocessed scallop pieces would simply pass through the mixer. However, Joaquin is silent in teaching specifically forming a crustacean, such as a crab or lobster, from the scallops as recited in claims 1 and 3.

10. Ikeuchi et al. also teach a seafood product that closely resembles the appearance, feel, and taste of a cooked expensive shellfish such as abalone, in addition to crustacean meat, including crabs and lobsters (Column 5, line 30 to Column 6, line 17 and Column 5, lines 5-21).

11. Therefore, it would have been obvious to modify Joaquin and form another type of shellfish, such as crustaceans as recited in claim 1, including crabs as recited in claim 3, since Joaquin teaches a general method of matching the appearance, feel, and taste of a cooked expensive shellfish, such as abalone, that will not be distinguishable from natural shellfish even by gourmets using scallops, and Ikeuchi et al. teach other expensive shellfish, besides abalone, that are desirably simulated with less expensive seafood material includes crustaceans or crab products. To further select any particular crab that would feed upon the scallop, as recited in claims 1 and 3, would have been obvious depending the particular cost of the crab meat since (1) it is notoriously well known that crabs eat scallops, (2) Joaquin teaches scallops are good for simulating less expensive shellfish, including abalone, and (3) Ikeuchi et al. teach it is desirable to not only simulate expensive abalone with inexpensive fish material, but other shellfish, such as crabs.

Art Unit: 1761

12. Regarding claim 5, modified Joaquin teaches lobster, but is silent in teaching Maine Lobster and Atlantic Sea Scallops. However, once it was known to form a simulative lobster with scallops, to select any particular type of lobster simulation or scallop would have been obvious, depending on (1) the desired appearance of the lobster (i.e. the appearance of Gulf Of Mexico Lobsters is distinct from Maine Lobsters), (2) the desired size of the scallops fiber length required to simulate lobster (i.e. Atlantic Sea Scallops are larger than Bay Scallops and provide longer fiber lengths).

13. Claims 7- 9, 11, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeuchi et al. (US 4692341) in view of Joaquin (US 3532512)

14. Regarding claims 7-9, Ikeuchi et al. teach a seafood product that closely resembles the appearance, feel, and taste of a cooked expensive shellfish such as crustacean meat, including crabs and lobsters, and abalone (Column 5, line 30 to Column 6, line 17 and Column 5, lines 5-21), but are silent in teaching the product comprises mollusk meat pieces that are broken along their natural planes of separation to form pieces comparable in volume to the crustacean pieces, as recited in claims 7 and 9, wherein the mollusk is fed upon by the crustacean and the mollusk was fresh, dry and not soaked in a water solution when supplied, as recited in claim 8.

15. Joaquin also teaches a simulated shellfish product based on a less expensive and less rare type of seafood. In particular, Joaquin teaches obtaining long separate fiber pieces from the grainy structure of the scallops and are reoriented to match not only the taste, but the grain structure or texture of abalone. The match is so close that

Art Unit: 1761

Joaquin claims to be able to fool gourmets by the taste, structure and texture. Thus, the volumes of the fiber pieces of the scallops must be comparable to the volume of the abalone since the scallop fibers are capable of forming an abalone like fiber structure and texture (Column 1, lines 10-70, Column 3, lines 40-50). Joaquin starts with scallops in their raw state and not soaked in water as recited in claim 8, places them in a dough mixer for tumbling and beating so that the scallop meat is naturally broken apart to yield separated long fibers that remain intact, and cooks the pieces. Joaquin implicitly teaches the meat breaks along its natural planes of separation because the shear stress of the seemingly random beating and tumbling applied to the surfaces of the scallops causes the meat to *only* separate along the plane that extends along the length of each scallop, not along the width (note Figure 1 in light of column 2, lines 17-72).

16. Therefore, it would have been obvious to modify Ikeuchi et al. and substitute the scallop fiber containing material of Joaquin for the fish paste, such that the scallops in their raw state and not soaked in water as recited in claim 8, are broken along their natural planes of separation to have a volume which is comparable to the volume of the abalone as recited in claim 7, since Ikeuchi et al. teach using fish paste will provide a shellfish product that closely *resembles* the appearance, feel, and taste of a cooked expensive shellfish, such as crustacean, including crabs and lobsters, or abalone and Joaquin teaches using the scallops will *match* the appearance, feel, and taste of a cooked expensive shellfish, such as abalone, that will not be distinguishable from natural abalone even by gourmets. It would have been further obvious to utilize the scallops for crustaceans or crab simulated products, as recited in claims 7 and 9, since

Art Unit: 1761

Ikeuchi et al. teach the material used to simulate expensive shellfish including abalone and crustaceans, such as crab and Joaquin teaches scallops are suitable to simulate expensive shellfish. To further select any particular crab that would feed upon the scallop, as recited in claims 7 and 9 would have been obvious depending the particular cost of the crab meat since (1) it is notoriously well known that crabs eat scallops and (2) Ikeuchi et al. teach simulating shellfish, such as crabs with less expensive material and (3) Joaquin teaches scallops are good for simulating less expensive shellfish. It would have been further obvious to modify Ikeuchi et al. and cause the meat to pass proximate portion of a surface which define a separation gap that is less than the meat's initial diameter, since Joaquin teaches the fibers are formed by placing meat in an apparatus with a dough mixer such that only meat fibers pass through the exit below, or proximate a surface having a separation gap less than the initial diameter of the meat.

17. Regarding claim 11, modified Ikeuchi et al. teach lobster, but are silent in teaching Maine Lobster and Atlantic Sea Scallops. However, once it was known to form a simulative lobster with scallops, to select any particular type of lobster simulation or scallop would have been obvious, depending on (1) the desired appearance of the lobster (i.e. the appearance of Gulf Of Mexico Lobsters is distinct from Maine Lobsters), (2) the desired size of the scallops fiber length required to simulate lobster (i.e. Atlantic Sea Scallops are larger than Bay Scallops and provide longer fiber lengths).

18. Regarding claim 15, modified Ikeuchi et al. do not expressly teach the particular method of applying shear stress, but the end result is the same: a simulated crustacean with supply of cooked small pieces of mollusks. These are product by process claims,

Art Unit: 1761

and it is noted that "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Response to Arguments

19. Applicant's arguments, filed February 24, 2005, with respect to extruding as compared to applying shear stress to separate along planes and form pieces that are comparable in volume of the crustacean and the rejection(s) of claim(s) Claim 1 under 35 U.S.C. 102(b) as being anticipated by Juarez, et al. (ES 2019193) and Claims 7-10 under 35 U.S.C. 102(b) as being anticipated by Juarez, et al. (ES 2019193) have been fully considered and are persuasive, since Juarez et al. , while teaching extruding, fails to teach the mollusks (1) have natural break lines and (2) that extrusion causes the break lines to form pieces of a particular volume. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as set forth above.

20. The rejection of Claim 1,2,5-8,11-13 under 35 U.S.C. 103(a) as being unpatentable over Yueh (US 3863017) in view of Joaquin (US 3532512) and Sugino et al. (US 4362752) and Claim 3,4,9,10 under 35 U.S.C. 103(a) as being unpatentable over Yueh (US 3863017) in view of Joaquin (US 3532512) and Sugino et al. (US

Art Unit: 1761

4362752) further in view of Ikeuchi et al. (US 4692341) have been withdrawn in light of the amended claim language. However, upon further consideration, a new ground(s) of rejection is made as set forth above.

21. Applicant's arguments filed February 24, 2005 with respect to Joaquin have been fully considered but they are not persuasive.

22. With respect to the new limitation of exerting a shear stress on the surface, Applicant contends that typical extrusion, shredding and grinding are quite different from this method of separation. It is noted that typical extrusion, shredding and grinding, all apply a shear stress to the surface of a material treated. Furthermore, shredding, as taught by Joaquin, meets the claimed limitations for the reasons discussed in the rejections above.

23. With respect to the breaking along natural planes/lines of separation of the meat, exposing a product, Applicant contends that Joaquin does not teach breaking the scallops along the natural break lines, and that the word "naturally" doesn't say anything about the manner of breaking and refers to the process. However, Applicant's attention is directed to the *entire* portion of Joaquin relied on for support for stating "natural break lines": Figure 1 in light of column 2, lines 17-52. Most importantly, Joaquin teaches "A characteristic of the edible scallop is that it is comprised of a large number of closely packed and greatly elongated muscle fibers which provide a grainy texture" and "scallops are tumbled and beat until their grainy structure is naturally broken apart with their long muscle fibers 20 separated but intact" (column 2, lines 17-52). Even ignoring "naturally", Joaquin implicitly teaches natural lines of separations. The phrase "broken

apart with their long muscle fibers 20 separated but intact” suggests the fibers separate along the length of the muscle fibers and do not separate along the width. One of ordinary skill in the art would suspect that there must be natural lines or planes along the length of the fibers at which Joaquin is separating because tumbling and beating results a separation of long intact fibers. Without some sort of natural plane/line of separation one would expect all surface of the fibers to be equally susceptible to the shear stress generated by tumbling /beating, and the grainy texture would separate into more randomly shaped pieces.

24. It is further noted that Applicant (Page 6 of the response, lines 22-23) has stated on record that a plane of separation is geometrically different from a line of separation. However, it appears that a plane of separation and a line separation as disclosed by applicant are interchangeable. The originally filed specification discloses both “lines” of separation (Page 3, lines 10-11) and “planes” of separation (Page 6, lines 20-21), and the originally presented claims 4,6,10,12,13 recited “lines” of separation. The specification fails to make a distinction between a plane of separation and a line of separation as it pertains to a mollusk meat. While a plane and line are geometrically different, for the purposes of the present invention both seem to refer to a portion of a mollusk meat that is pre-disposed to separation.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Witte (US 4234609) teaches forming food products from mollusks


Art Unit: 1761

and Shenouda et al. (US 4396634) teach forming a crustacean from a less expensive underutilized fish. Rastogi (US 6723362 B1), Sawyer (US 5846586) and Kou (US 5431938) teach forming a large expensive shrimp from whole, smaller inexpensive shrimps.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (571) 272-1402. The examiner can normally be reached on 7:00AM-3:30PM M-F.

27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Robert Madsen
Examiner
Art Unit 1761

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